

The Royal Institute for Cultural Heritage (KIK) is the federal scientific institution responsible for the documentation, study and conservation-restoration of our country's cultural and artistic heritage. Art historians, photographers, chemists, archaeologists, engineers and conservators-restorers carry out interdisciplinary leading-edge research on the materials and techniques used in heritage and on the products and methods of conservation-restoration. KIK is a unique instrument for making scientific, photographic and technical documentation available in these fields.

For a period of four years, KIK is currently looking for a full-time

Scientific collaborator (m/f) 'laboratory monuments'

The candidate will be employed in the laboratory department, monuments and monumental decoration unit, as part of the BRAIN-be research project CLIMPACTH. This project is a collaboration between the KIK, the Royal Meteorological Institute of Belgium (RMI) and the Universities of Ghent (faculty of Engineering and Architecture and the research groups PProGRess and Atmospheric Physics) and Antwerp (research groups UA-ARCHES and UA-VisionLab).

The CLIMPACTH project will develop a decision model and framework to support sustainable management and risk management of built heritage and its collection(s) that are subject to increased damage risks due to climate change (floods, periods of intense rainfall, droughts, ...). The model also contributes to a more relevant assessment of the impact of climate actions such as those on the energy performance of the built heritage. The project focuses primarily on the study and selection of materials and procedures for the conservation-restoration and preventive conservation of the immovable heritage and its collection(s). The project aims to provide civil authorities, architects, building managers and engineering firms in the field of building physics with the necessary tools, methodologies and a knowledge database to assess the impact of climate change on the preventive conservation of the built heritage and its collections and thus achieve a paradigm shift towards a more environmentally friendly and sustainable management of heritage.

The candidate's tasks may include:

- The evaluation of material use and damage phenomena of monumental heritage, and consultation with stakeholders;
- The sampling and coordination of the execution of material analyses to laboratory technicians;
- The coordination and execution of analysis of materials, material properties and degradation phenomena by means of hyperspectral analysis, in-situ and in the laboratory, for the purpose of material selection and automatic mapping of material properties and damage;
- The coordination and execution of analysis of material properties as a function of moisture in historical masonry and the setting up and maintenance of material databases;
- The analysis of climate data in function of the hygrothermal modelling of moisture behaviour in historic masonry;
- The hygrothermal modelling of moisture behaviour in historic masonry;
- The hygrothermal modelling of the indoor environment in function of the preservation of the collections;
- The interpretation, modelling and reporting of the analysis results;
- The administrative support in the context of the implementation of the project (organisation of meetings, reporting, website, etc.);
- Writing scientific publications;



- The presentation of research results at (inter)national colloquia, conferences, ...

In view of the cooperation with our university partners within the framework of this research project, it is also encouraged to link the research to a doctoral study at the University of Antwerp.

We ask:

- You hold a university degree of master of science in engineering, architecture, exact sciences, or equivalent scientific training;
- You are able to communicate fluently in English and/or Dutch; knowledge of French is considered a plus.
- A good knowledge of Dutch or French will be considered an additional asset.
- You are able to work in a team and independently.
- You are willing to go to international conferences, present and publish results.

We offer:

- A full-time contract for four years, starting at the latest on 1 May 2023;
- Depending on your relevant experience, a minimum (full-time) gross monthly salary of € 3.646,48 (salary scale SW10 according to the current salary index), plus holiday allowance and end-of-year bonus;
- Sliding working hours in a 38-hour work week;
- Place of employment: the KIK in Brussels, Parc du Cinquantenaire 1 or on site;
- Free commuting by public transport and possibility to get a bike allowance;
- Advantageous collective hospitalisation insurance;
- Fed+ advantage card.

Application procedure:

Candidates should send their complete application file (cover letter, curriculum vitae, with copies of diplomas and proof of good behaviour and morals) by e-mail to <u>vacature@kikirpa.be</u> and in copy to <u>roald.hayen@kikirpa.be</u>, with the title "Scientific employee laboratory monuments", no later than Monday 27 February 2023 at 23h59. Incomplete or late applications will not be taken into consideration.

Contact: Roald Hayen